

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A sensor chip adapted for a sensor and guide wire assembly for intravascular measurement of at least one physiological variable in a living body, wherein the sensor chip comprises a first end portion, a first side of which is provided with a pressure sensitive device, and a hinge portion provided between the first end portion and a second portion of the sensor chip.

2. (Original) A sensor chip according to claim 1, wherein the hinge portion comprises an area of reduced cross-sectional area.

3. (Original) A sensor chip according to claim 1, wherein the sensor chip is adapted to be mounted on a core wire.

4. Cancelled.

5. (Original) A sensor chip for a sensor and guide wire assembly for intravascular measurement of at least one physiological variable in a living body, which sensor chip is adapted to be mounted on a core wire and has a first end portion, a first side of which is provided with a pressure sensitive device, wherein the sensor chip comprises a recess, which is provided between the first end portion and a second portion of the sensor chip.

6. (Original) A sensor chip according to claim 5, wherein the recess is provided at the side that is opposite to the side of the sensor chip where the pressure sensitive device is provided.

7. (Original) A sensor chip according to claim 5, wherein the pressure sensitive device is provided close to the first end of the sensor chip.

8. (Original) A sensor chip according to claim 5, wherein the recess longitudinally is provided close to the pressure sensitive device.

9. (Original) A sensor chip according to claim 5, wherein the depth of the recess is about $1/3$ of the thickness of the sensor chip.
10. (Original) A sensor chip according to claim 5, wherein several recesses are provided.
11. (Original) A sensor chip according to claim 5, wherein the sensor chip is a piezoresistive pressure transducer.
12. (Original) A sensor and guide wire assembly for intravascular measurement of at least one physiological variable in a living body, comprising a core wire and a sensor element having a first end portion, a first side of which is provided with a pressure sensitive device, wherein the sensor element comprises a recess, which is provided between the first end portion and a second portion of the sensor element.
13. (Original) A sensor and guide wire assembly according to claim 12, wherein the recess is provided at the side that is opposite to the side of the sensor element where the pressure sensitive device is provided.
14. (Original) A sensor and guide wire assembly according to claim 12, wherein the pressure sensitive device is provided close to the first end of the sensor element.
15. (Original) A sensor and guide wire assembly according to claim 12, wherein the recess longitudinally is provided close to the pressure sensitive device.
16. (Original) A sensor and guide wire assembly according to claim 12, wherein the depth of the recess is about $1/3$ of the thickness of the sensor element.
17. (Original) A sensor and guide wire assembly according to claim 12, wherein several recesses are provided.
18. (Original) A sensor and guide wire assembly according to claim 12, wherein the second portion of the sensor element is attached to the core wire.

19. (Original) A sensor and guide wire assembly according to claim 18, wherein the first end portion of the sensor element is attached to the core wire.

20. (Original) A sensor and guide wire assembly according to claim 12, wherein the sensor element is a piezoresistive pressure transducer.

21. (Withdrawn) A method of manufacturing a silicon sensor chip for a sensor guide wire assembly for intravascular measurement of at least one physiological variable in a living body, comprising:

providing the sensor chip with a recess by etching.